We Claim:

1. A method for controlling valve operation of valves coupled to a cylinder of an internal combustion engine with a piston, the method comprising:

using at least a sensor coupled to the engine to indicate potential interference between the piston and the valve when the valves are operating in a condition where such interference is possible;

determining whether the sensor has degraded; and

in response to a determination that said sensor has degraded, adjusting operation of the valves to a condition where there is no potential for interference.

2. The method of claim 1 wherein said adjusting operation includes retarding cam timing.

3. The method of claim 1 wherein said adjusting operation includes operating a low valve lift.

4. The method of claim 1 wherein said adjusting operation includes adjusting compression ratio to a lower compression ratio.

5. The method of claim 1 wherein said sensor provides information in determining cam timing.

6. The method of claim 1 wherein said sensor provides information in determining valve lift.

7. The method of claim 1 wherein said sensor provides information in determining compression ratio.

8. A method for controlling valve operation of valves coupled to a cylinder of an internal combustion engine with a piston, the engine having a device to adjust compression ratio of the cylinder, the method comprising:

indicating potential interference between the piston and the valve based on engine operating conditions; and

in response to said indication, reducing compression ratio of the cylinder by adjusting said device.

9. The method of claim 8 wherein said potential interference is indicated based on valve timing.

10. The method of claim 8 wherein said potential interference is indicated based on valve timing of a variable valve timing mechanism.

11. The method of claim 8 wherein said potential interference is indicated based on valve lift of a variable valve lift mechanism.

12. The method of claim 8 wherein said potential interference is indicated based on compression ratio of a variable compression ratio mechanism.

13. The method of claim 8 wherein said adjusting is accomplished during engine operation.

14. The method of claim 8 further comprising adjusting engine torque to compensate for said reduction.

15. A computer storage medium having instructions encoded therein for controlling valve operation of valves coupled to a cylinder of an internal combustion engine with a piston, the engine in a powertrain in a vehicle on the road, said medium comprising

code for indicating potential interference between the piston and the valve;

code for selecting at least one of valve timing and valve lift based on a direction of valve timing change and valve lift change and further based on sensor or actuator degradation; and

code for adjusting said selected one of valve timing and valve lift to reduce said potential for interference in response to said indication.

16. A computer storage medium having instructions encoded therein for controlling valve operation of valves coupled to a cylinder of an internal combustion engine with a piston, the engine in a powertrain in a vehicle on the road, the engine having a variable compression ratio mechanism, said medium comprising:

code for indicating potential interference between the piston and the valve;

code for selecting at least one of valve timing, valve lift, and compression based on sensor or actuator degradation; and

code for adjusting said selected one of valve timing, valve lift, and compression ratio to reduce said potential for interference in response to said indication.

17. A computer storage medium having instructions encoded therein for controlling valve operation of valves coupled to a cylinder of an internal combustion engine with a piston, the engine in a powertrain in a vehicle on the road, the engine having a variable compression ratio mechanism, said medium comprising

code for indicating potential interference between the piston and the valve;

code for indicating degradation of at least one of a valve timing and valve lift actuator or sensor; and

code for reducing compression ratio in response to said indication.

18. A computer storage medium having instructions encoded therein for controlling valve operation of valves coupled to a cylinder of an internal combustion engine with a piston, the engine in a powertrain in a vehicle on the road, said medium comprising:

code for indicating potential interference between the piston and the valve;

code for selecting at least one of valve timing and valve lift within an engine event from said indication; and

code for adjusting said selected one of valve timing and valve lift to reduce said potential for interference in response to said indication.

19. A computer storage medium having instructions encoded therein for controlling valve operation of valves coupled to a cylinder of an internal combustion engine with a piston, the engine in a powertrain in a vehicle on the road, said medium comprising:

code for indicating potential interference between the piston and the valve; and

code for adjusting both of said valve timing and valve lift to reduce said potential for interference in response to said indication.